REMARKS

In the Office Action mailed on March 22, 2004, claim 5 was rejected under 35 U.S.C. 112, second paragraph; claims 1-4 and 6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (U.S. Patent No. 5,892,515) in view of Cline et al. (U.S. Patent No. 6,204,853); and claim 5 was rejected as being unpatentable over 35 U.S.C. 103(a) as being un patentable over Kobayashi et al. in view of Cline et al. and further in view of the Applicants' admitted prior art (APA). The foregoing rejections are respectively traversed.

In accordance with the foregoing, claims 1 and 6 have been amended and claims 4 and 5 have been cancelled.

Claims 1-3 and 6 are now pending in the subject application, of which claims 1 and 6 are independent.

Kobayashi discloses a method and apparatus for dividing shape expressed on three-dimensional space into elements. In FIGS. 1-6 of Kobayashi disclose a recognition model constructed of only line segments parallel to orthogonal coordinate axes displayed on a screen as a mapping model divided into a set of unit cubes. The recognition model is produced in the course where a three-dimensional solid shaped model is subdivided into a finite element by employing the curved line coordinate transforming method. Specifically, Koboyashi discusses producing the recognition model by allocating each edge line of the shape model to any one of coordinate axial directions in an orthogonal coordinate system, while making connection relationships between edge lines of the recognition model equal to those f the shape model (see column 3, lines 41-60).

Cline discloses a method for filtering data in a multi-dimensional sense without blurring edges of structures in the image and a system that automatically segments multi-dimensional volumetric images into separate structures (see column 2,lines 39-44). Specifically, Cline discusses imaging in medical diagnosis, machine version and other image processing applications.

The APA as shown in FIG. 10 of the subject application, only shows that it is known that the accuracy of analysis by the finite element method increases when the number of divisions increases.

However, Kobayashi, Cline nor the APA, individually or combined, discuss "an edge detecting unit which detects an edge of said three-dimensional model" and "a number-of-divisions varying unit which varies the number of said plurality of hexahedral elements, wherein said analyzing unit determines a converged value of a physical quantity based on a local

maximum of calculated values of said physical quantity which are obtained while increasing the number of said plurality of hexahedral elements by said number-of-divisions varying unit," as recited in amended claims 1 and 6.

In addition, each of claims 2 and 3 recite additional limitations of the present invention. For example, claim 2 recites "the edge detecting unit detects only at least one edge having an angle which does not exceed a predetermined amount.

Therefore, claims 1-3 and 6 patentably distinguish over the combination of Kobayashi in view of Cline and further in view of the APA.

Withdrawal of the foregoing rejections is respectfully requested.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: Deidre M. Davis

Deidre M. Davis
Registration No. 52,797

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501